

BONELLI PARK BOAT LAUNCHING FACILITY

**Phase I Funding: \$100,000
\$1,303,500 Grant**

SUMMARY

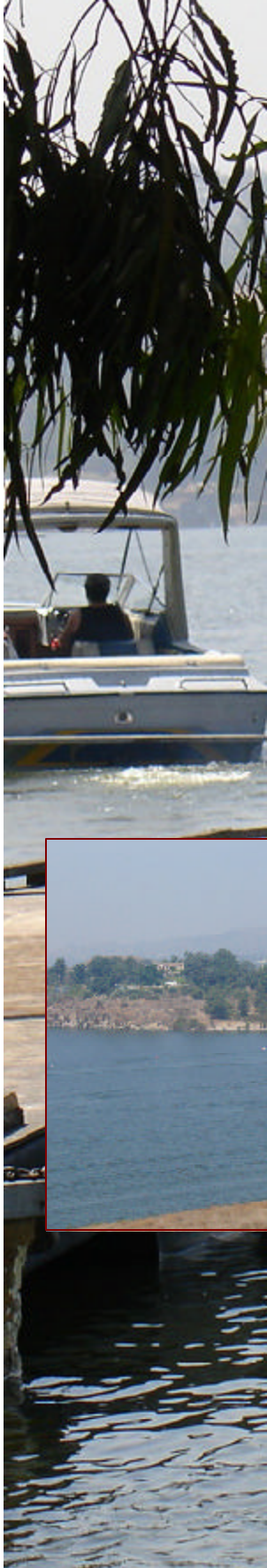
Los Angeles County (County) as applied to the Department of Boating and Waterways for a grant to make improvements to the Frank G. Bonelli Regional County Park Boat Launching Facility (Bonelli Park BLF).

The Bonelli Park BLF is located on Puddingstone Lake in the San Gabriel Valley in eastern Los Angeles County. The regional county park is partially located in the cities of San Dimas, La Verne, and Pomona. The existing facility, originally constructed in the late 1960s by the U. S. Army Corps of Engineers, consists of two 2-lane concrete powerboat launching ramps, boarding floats, a parking area for 80 vehicle/trailers, a restroom, picnic shade structures, and a beach area. There is also a sailboat launch facility in the park with its own parking, restroom and picnic facilities.

The proposed project entails: (1) extension of the two 2-lane powerboat launch ramps, (2) installation of two boarding floats, (3) construction of a new overflow parking area, (4) construction of a restroom, (5) utilities, and (6) a project credit sign.

The benefit/cost ratio must be greater than unity (1.00) before public investment in a project is justified. This project is considered economically feasible with a benefit/cost ratio of 3.12.

DBW loans are funded exclusively through the Harbors and Watercraft Revolving Fund. These funds are derived from the gasoline taxes paid by boaters in California and the repayment of loan principal and interest. No State General Fund dollars are used



PROJECT

APPLICANT

The grant applicant for this project is Los Angeles County (County).

PROJECT IDENTIFICATION

The proposed project entails making improvements to the powerboat launching facilities on Puddingstone Lake. The project area is the Frank G. Bonelli Regional County Park Boat Launching Facility (Bonelli Park BLF). The existing facilities were originally constructed in the late 1960s by the U. S. Army Corps of Engineers and consist of two 2-lane concrete boat launching ramps, boarding floats, a parking area for 80 vehicle/trailers, a restroom, picnic shade structures, and a beach area. There is also a sailboat launch facility in the park with its own parking, restroom and picnic facilities.

PROJECT LOCATION

The Bonelli Park BLF is located in the San Gabriel Valley in eastern Los Angeles County. The regional county park is partially located in the cities of San Dimas, La Verne, and Pomona.

ACCESS TO PROJECT

From Los Angeles, take Interstate 10 east, then take Highway 57 north to Via Verde Drive. From Via Verde Drive, turn right on San Dimas Ave., then right on Puddingstone Drive. The boat launching facility will be on the right side.

AREA DESCRIPTION

The County was established in 1850, and presently has the largest population of any county in the nation (10,226,506 as of January 2005). The County covers 4,084 square miles, with 81 miles of coastline. Twenty-eight percent of California's residents live in the County. Frank G.

Bonelli Regional County Park includes a 250-acre lake for swimming, waterskiing, windsurfing, and sailing. The lake is also stocked with trout, bluegill, catfish, and largemouth bass. Other recreational opportunities at the park include boat rentals, an equestrian center, recreational vehicle campsites, trails for hiking, biking and horseback riding, gazebos, and group rental picnic areas.

PREVIOUS COMMISSION ACTION

There has been no previous Commission action at the Bonelli Park BLF.

ENGINEERING CONSIDERATIONS

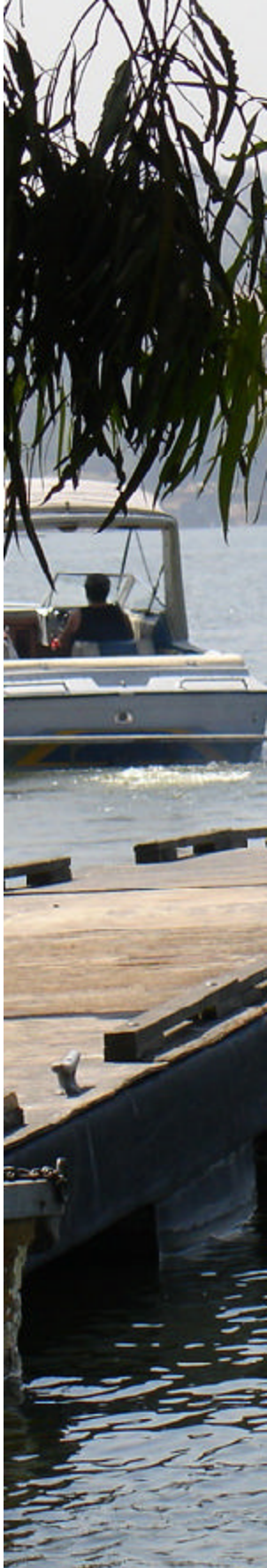
INTRODUCTION

Before a project is submitted to the Governor for inclusion in the budget, Department of Boating and Waterways (DBW) staff reviews both the site and the application to verify that the proposed project will meet DBW standards when completed. Planning personnel visit the site and discuss project layout and components with the applicant. After an application is received, DBW engineers review the project proposal. DBW's engineering review includes an analysis of site use, review of project components, and verification of estimated costs. Only after it is determined that the proposed project meets DBW standards and the preliminary cost estimate is verified is the project included in the budget.

Once the proposed project is approved by the DBW Commission, plans and specifications will be finalized and a final cost estimate will be determined for the project. If the final cost estimate exceeds the preliminary cost estimate the grantee has a number of options. It may either find additional funds elsewhere, alter or scale down the project, apply for additional funding, or discontinue the project. Any scope change or increase in cost to DBW requires additional Commission consideration. If the grantee discontinues the project any DBW funds expended by the grantee must be returned to DBW.

PROPOSED PROJECT

The proposed Bonelli BLF project considered in this report entails: (1) extension of two 2-lane powerboat launch ramps by 10 feet each, (2) installation of two 8' wide by 80' long pile-guided boarding floats (one at each ramp), (3) construction of a new 25 vehicle/trailer overflow parking area, (4) construction of a barrier-free access six-unit restroom, (5) utilities, and (6) a concrete project credit sign.



COST ESTIMATE

PROJECT ITEM	DBW FUNDING
Site Preparation	\$ 80,000
Coffer Dam	66,000
Boat Ramp	91,000
Boarding Floats	90,000
Piles	23,000
Parking Area	165,000
Restroom	233,000
Utilities	115,000
Concrete Project Sign	<u>6,000</u>
SUBTOTAL	\$ 869,000
Escalation*	173,800
Contingency*	86,900
Engineering*	104,280
Inspection*	43,450
Permits*	<u>26,070</u>
TOTAL	\$ 1,303,500

*Escalation is 20%; contingency is 10%; engineering is 12%; inspection is 5%, and; permits are 3% of construction subtotal.

CONCLUSION

There are no particularly difficult or unusual problems associated with this project and it falls within the normal range of practice for design and construction of projects of this type. Therefore, the proposed project is considered feasible from an engineering standpoint at a total estimated cost of \$1,303,500.

ECONOMIC ANALYSIS

INTRODUCTION

The economic justification of any proposed project rests upon a comparison of the benefits and costs attributable to the project. A benefit/cost analysis is performed to demonstrate whether the total cost of a project to society is justified by its overall benefit to society. A project is deemed beneficial and therefore economically feasible when total benefits equal or exceed total costs.

THE BENEFIT/COST PROCESS

Costs and Benefits, and user data are verified by comparison with data published in the 2002 California Boating Facilities Needs Assessment (BNA). BNA Volume V - Boating Economic

Assessments and Facilities Demand Projections - summarizes the economic benefits of boating to California, the values of recreational boating in California, and the demand projections for boating and

TABLE 1B				
NUMBER IN MKT. AREA		ACTUAL PROJECTED		
		2004	2024	
BOATS < 26' IN LENGTH	low	223,207	257,871	0.78%
	high	223,207	298,512	1.69%
ANNUAL GROWTH RATE				1.24%

boating facilities derived from the 2001 California Boats and Boaters Survey (BBS). This project is located in the South Coast region (see Glossary/Data Sources, #11).

The first step in the benefit/cost analysis is to determine annual benefits. Annual benefits are determined by calculating the annual base

TABLE 2

PROJECT USER DAYS

		USER DAY VALUE	
		CPI	\$
1	57,555		17.89
2	58,269		2.5%
3	58,991		
4	59,723	ANNUAL BENEFITS	1,029,658
5	60,463	2	1,068,486
6	61,213	3	1,081,736
7	61,972	4	1,095,149
8	62,740	5	1,108,729
9	63,518	6	1,122,477
10	64,306	7	1,136,396
11	65,103	8	1,150,487
12	65,911	9	1,164,753
13	66,728	10	1,179,196
14	67,555	11	1,193,818
15	68,393	12	1,208,621
16	69,241	13	1,223,608
17	70,100	14	1,238,781
18	70,969	15	1,254,142
19	71,849	16	1,269,693
20	72,740	17	1,285,438
		18	1,301,377
		19	1,317,514
		20	1,333,851

year user days (Table 1A) and the annual percentage growth rate (Table 1B). These two are multiplied to give the project user days per year. The project user days per year are multiplied by a user day value plus the expected annual percent increase in the Consumer Price Index to give annual benefits (Table 2).

Next, annual costs are determined by multiplying the existing or projected annual boat launches for the facility by the cost per boat launching and the

Glossary/Data Sources

Much of the data below was derived from the 2002 California Boating Facilities Needs Assessment (BNA) - a comprehensive assessment of boats and boating facilities statewide.

1. Annual Base Year User Days - annual boat launches times average persons aboard a boat.

2. Annual Boat Launches - existing or projected yearly boat launches at a facility, estimated by the grantee, or from regional data from the BBS.

3. Average Persons Aboard a Boat - regional data from the BBS.

4. Annual Percentage Growth Rate - the average of the low and high boat usage (over the 20-year life expectancy of the project) derived from boat forecasts regional data for boats less than 26 foot in length.

5. Boat Forecasts Regional Data - boat ownership in California by region and boat length through 2020. Data sources include DMV Year-End Boat Registration Report; DMV Boat Registration Data Tapes; California Department of Finance, County Population Estimates for January 1; California Department of Finance, Interim County Population Projections; US MARAD, Merchant Vessels of the U.S.

6. User Day Value - the measure of the value of one day of recreation to the user. For the purposes of this analysis, it is the value of recreation provided by publicly accessible waterways and boating facilities within California. The user day value was determined by using a technique known as the travel cost method. The travel cost method assumes that an individual's willingness to pay time and travel expenses for a recreational outing can be estimated based on the number of trips that they make at different travel costs. These costs can then be used as proxy to estimate the "price" of recreation.

Glossary/Data Sources ~ Continued ~

The BBS estimated a travel cost per day for recreational boating in California, which was then divided by the average number of persons aboard a boat on an average boating trip. This yielded an average travel cost per person per day of boating of \$17.89. This is the user day value used in this benefit/cost analysis.

7. Consumer Price Index - monthly data on changes in the prices paid by urban consumers for a representative basket of goods and services.

8. Boat launching fees - existing or projected fees for boat launching from grantee.

9. Annual Percentage Cost Escalation Rate- the annual percent increase in the 20-city average of the construction cost index.

10. Standard cost - The cost to be used in the calculation of annual costs when the boat launching facility does not charge a fee. This cost (\$5.23) is derived from a DBW Fee Survey completed in August 2001, and is increased by the Consumer Price Index annually.

11. Regional Data - In the BNA, California is divided into ten regions: North Coast, San Francisco, Central Coast, South Coast, San Diego, Northern Interior, Sacramento Basin, Central Valley, Eastern Sierra, and Southern Interior.

expected annual percent cost escalation rate to give annual costs. If there is no charge for boat launching at the facility, a standard cost is substituted in the equation (Table 3).

Project benefits per year and project operating costs per year are then discounted to yield their net present value. Since the value of a dollar is considered to be greater in the present year than in some future year, a discount rate is applied in order to de-inflate the future

TABLE 3

BOAT LAUNCHING FEE	12.00	
ANNUAL LAUNCHES	15,000	
ANNUAL COST	\$180,000	
ANNUAL COST ESCALATION	4.80%	
ANNUAL GROWTH RATE		2.08%
ANNUAL COSTS	1	\$ 180,000
	2	\$ 188,640
	3	\$ 197,695
	4	\$ 207,184
	5	\$ 217,129
	6	\$ 227,551
	7	\$ 238,474
	8	\$ 249,920
	9	\$ 261,916
	10	\$ 274,488
	11	\$ 287,664
	12	\$ 301,472
	13	\$ 315,942
	14	\$ 331,108
	15	\$ 347,001
	16	\$ 363,657
	17	\$ 381,112
	18	\$ 399,406
	19	\$ 418,577
	20	\$ 438,669
		\$ 183,744
		\$ 192,564
		\$ 201,807
		\$ 211,493
		\$ 221,645
		\$ 232,284
		\$ 243,434
		\$ 255,119
		\$ 267,364
		\$ 280,198
		\$ 293,647
		\$ 307,742
		\$ 322,514
		\$ 337,995
		\$ 354,218
		\$ 371,221
		\$ 389,039
		\$ 407,713
		\$ 427,284
		\$ 447,793

TABLE 4

BENEFITS		NET PRESENT VALUE	
Year	Benefits	Discount Rate	Benefits
0	\$1,029,658	1.00	\$1,029,660
1	\$1,068,486	1.05	\$1,022,470
2	\$1,081,736	1.09	\$990,580
3	\$1,095,149	1.14	\$959,680
4	\$1,108,729	1.19	\$929,740
5	\$1,122,477	1.25	\$900,730
6	\$1,136,396	1.30	\$872,630
7	\$1,150,487	1.36	\$845,410
8	\$1,164,753	1.42	\$819,040
9	\$1,179,196	1.49	\$793,490
10	\$1,193,818	1.55	\$768,730
11	\$1,208,621	1.62	\$744,750
12	\$1,223,608	1.70	\$721,520
13	\$1,238,781	1.77	\$699,010
14	\$1,254,142	1.85	\$677,200
15	\$1,269,693	1.94	\$656,080
16	\$1,285,438	2.02	\$635,610
17	\$1,301,377	2.11	\$615,780
18	\$1,317,514	2.21	\$596,570
19	\$1,333,851	2.31	\$577,960
Total Net Present Value of Benefits:			\$15,856,640

The discount rate being used is 4.50%. This is equivalent to the interest rate being charged by the Department of Boating and Waterways on its public loans. Present value is determined by dividing future benefits by $(1+r)^n$, where r is the discount rate and n is the number of years into the future.

dollars and to convert the benefits and costs occurring over the 20-year grant period to a present day value. In this manner, the present day value may be comparable to other values in the present.

The sum of the present benefits and the discounted future benefits is the net present value of the project (Table 4). The sum of the present costs, including capital costs, and the discounted future costs is the net present cost of the project (Table 5).

The net present value of benefits is then divided by the net present value of costs to yield the benefit/cost ratio. The benefit/cost ratio must be greater than unity (1.00) before public investment in a project is justified (Table 6).

TABLE 5

COSTS		NET PRESENT VALUE		
Year	Capital Costs		Discount Factor	Cost
0	\$1,303,500	\$183,744	1.000	1,487,240
1		\$192,564	1.045	184,270
2		\$201,807	1.092	184,800
3		\$211,493	1.141	185,330
4		\$221,645	1.193	185,860
5		\$232,284	1.246	186,400
6		\$243,434	1.302	186,930
7		\$255,119	1.361	187,470
8		\$267,364	1.422	188,010
9		\$280,198	1.486	188,550
10		\$293,647	1.553	189,090
11		\$307,742	1.623	189,630
12		\$322,514	1.696	190,170
13		\$337,995	1.772	190,720
14		\$354,218	1.852	191,270
15		\$371,221	1.935	191,820
16		\$389,039	2.022	192,370
17		\$407,713	2.113	192,920
18		\$427,284	2.208	193,470
19		\$447,793	2.308	194,030
Total Present Value of Costs:				\$5,080,350

The discount rate being used is 4.50%. This is equivalent to the interest rate being charged by the Department of Boating and Waterways on its public loans. Present value is determined by dividing future benefits by $(1+r)^n$, where r is the discount rate and n is the number of years into the future.

ANNUAL BENEFITS

Annual base year user days for this project are 56,850 (Table 1A). The annual percentage growth rate is 1.24% (Table 1B). Annual benefits are shown in Table 2. The net present value of benefits is shown in Table 4.

ANNUAL COST

Annual costs are shown in Table 3. The net present value of costs is shown in Table 5.

BENEFIT/COST RATIO

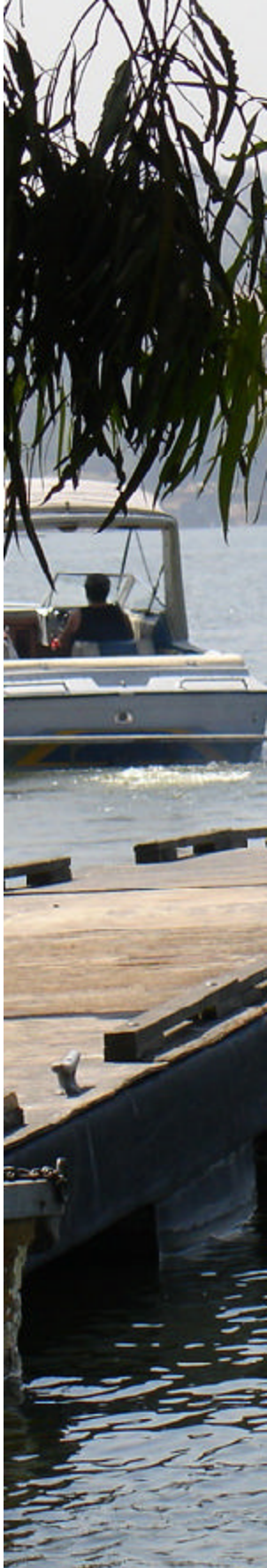
The benefit/cost ratio for this project is 3.12 (Table 6). This means that estimated benefits exceed estimated costs. The construction of this project is, therefore, is economically justified.

FINANCIAL CONSIDERATIONS

Projects are publicly funded from boaters tax dollars. After the project is funded, the grantee must maintain the facility for 20 years at no additional cost to the Department. The completed project will be open to all on an equal and reasonable basis. There is a \$6.00 fee to launch a boat, and a \$6.00 parking fee at the Bonelli Park BLF.

TABLE 6

NET PRESENT VALUE OF BENEFITS	\$15,856,640
NET PRESENT VALUE OF COSTS	\$5,080,350
BENEFIT/COST RATIO	3.12



CONCLUSION

This project is being recommended because the boat launching facility is approximately 40 years old and in need of refurbishment.

RECOMMENDATION

In view of the foregoing demonstration of the project's engineering and financial feasibility, staff recommends that the Boating and Waterways Commission consent to first phase grant funding (totaling \$100,000) of the proposed \$1,303,500 grant to Los Angeles County for improvements to the Bonelli Park BLF.

Bonelli Park Boat Launching Facility

